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| 09/930,654 | 08/15/2001 | Menno Anne Treffers | NL000448 | 1920 |

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EXAMINER

POPHAM, JEFFREY D

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| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|----------------------------------------|--|
| Office Action Summary | Application No. 09/930,654 | Applicant(s) TREFFERS ET AL. | |
| | Examiner Jeffrey D. Popham | Art Unit 2137 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Remarks

Claims 1-13 are pending.

Response to Arguments

1. Applicant's arguments filed 8/17/2005 have been fully considered but they are not persuasive. Regarding the argument that Shear does not disclose or suggest that the control should be encrypted by a hidden information; this control (usage) information may not be the only portion that is encrypted with the hidden information, but Shear does disclose that the hidden information is used for encrypting or verifying the control information. There are at least two ways in which this is done in Shear. The first stores control information and the key block within a secure container, and the hidden keys are used to encrypt and decrypt this container. The second stores the key block outside the secure container, uses the hidden keys to encrypt/decrypt the key block and uses keys from the key block to access the secure container, which contains the control information. This can be seen on Pages 9-10, in Paragraphs 129-142, as well as Pages 15-16, in Paragraphs 216-220.

Regarding the argument that Downs and Ginter are not relevant to the subject invention which claims a passive record carrier storing the information on a surface which is open for inspection, this narrowing of the record carrier is not claimed. In addition, claim 8 states that a record carrier could be a hard disc, which would not store information on a surface which is open for inspection.

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Regarding the argument that Ginter changes the encryption key for a reason different from the applicant's reasons, this is deemed irrelevant to the claimed invention. Within the combination of Shear as modified by Downs and Ginter, the hidden key that is used to encrypt the usage information is changed each time the usage information is updated and the usage information is re-encrypted with the new key. Ginter states that this is done in order to give an attacker less ciphertext to use in an attempt to obtain the key. This changing of the key will also prevent "copy and restore" attacks since the key cannot be accessed or copied from 1 record carrier to another in an attempt to obtain more usage than was originally specified, thus meaning that the record carrier in which the encrypted information and hidden key are held is the only one that contains the hidden key, and this record carrier will not allow access to the data since the usage information is encrypted with an old hidden key and cannot be decrypted with this incorrect, new, hidden key.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shear (U.S. Patent Application Publication 2001/0042043) in view of Downs (U.S. Patent 6,226,618) and Ginter (U.S. Patent 5,892,900).

Regarding Claim 1,

Shear discloses a method for controlling distribution and use of a digital work, comprising the steps of:

a) Attaching a usage right information to the digital work, the usage right information defining one or more conditions which must be satisfied in order for a usage right of the usage right information to be exercised (Page 11, Paragraph 169);

b) Storing the digital work and the attached usage right information on a record carrier (Page 11, Paragraph 170);

d) Refusing use of the digital work if the usage right information indicates that the usage right has been exercised Page 17, Paragraph 251);

Characterized in that the method further comprises the step of:

e) Storing a hidden information in a hidden channel used for encrypting or verifying the usage right information (Pages 15-16, Paragraphs 216-220);

But does not disclose updating the attached usage right information with every use of the digital work and changing the hidden information when the usage right information has changed.

Downs, however, discloses updating the attached usage right information with every use of the digital work (Column 21, lines 42-63). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the content delivery system of Downs into the rights protection system of Shear in order to enforce the usage rights on the original copy and any new secondary copy.

Downs does not disclose changing the hidden information when the usage right information has changed.

Ginter, however, discloses changing the hidden information used for encrypting or verifying the usage right information when the usage right information has changed (Column 136, lines 37-42). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Ginter into the rights protection system of Shear as modified by Downs in order to lessen the time during which each key is used, giving an attacker less ciphertext to use in an attempt to obtain the key (Column 212, lines 43-52).

Regarding Claim 11,

Claim 11 is an apparatus claim that is broader than method claim 1 and is rejected for the same reasons.

Regarding Claim 13,

Claim 13 is an apparatus claim that corresponds to method claim 1 and is rejected for the same reasons.

Regarding Claim 3,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Ginter discloses that the hidden information is a key used for decrypting the usage right information, wherein the changing step includes randomly changing the key and re-encrypting the usage right information using the changed key, when the usage right information has changed (Column 136, lines 37-59).

Regarding Claim 4,

Shear as modified by Downs and Ginter discloses the method of claim 3, in addition, Ginter discloses that the previous key is destroyed after the change of the key (Column 214, lines 4-14).

Regarding Claim 5,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Shear discloses that the hidden channel is arranged to be not accessible by commercial reproducing devices (Page 15, Paragraph 218).

Regarding Claim 6,

Shear as modified by Downs and Ginter discloses the method of claim 5, in addition, Shear discloses that the hidden

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channel is generated by: storing the hidden information in deliberate errors which can be corrected again, storing the hidden information in merging bits of a runlength-limited code, controlling a polarity of predetermined runlength of a predetermined word of a runlength-limited code according to the hidden information, storing the hidden information in deliberate errors in a time-base, or storing the hidden information in a memory embedded with a disc controller (Page 15, Paragraph 218).

Regarding Claim 7,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Shear discloses that the attached usage right information is stored in a table together with a key information used for decrypting the digital work (Page 15, Paragraph 216).

Regarding Claim 8,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Shear discloses that the digital work is an audio track downloaded from the Internet, and the record carrier is a recordable optical disc, a hard disc, a magneto-optic recording device, a magnetic tape, or a memory card (Page 12, Paragraph 178).

Regarding Claim 9,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Downs discloses that the usage right information comprises a counter information which can be updated when the usage right has been exercised (Column 21, lines 42-63).

Regarding Claim 10,

Shear as modified by Downs and Ginter discloses the method of claim 1, in addition, Shear discloses that the record carrier has a plurality of tracks, characterized in that each track of the record carrier comprises its own usage right information and hidden information (Page 13, Paragraph 183).

Regarding Claim 12,

Shear as modified by Downs and Ginter discloses the record carrier of claim 11, in addition, Shear discloses that the record carrier is a recordable optical disc, in particular a CD or a DVD (Page 11, Paragraph 162).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shear in view of Downs and Ginter, further in view of Smithies (U.S. Patent 6,064,751).

Shear as modified by Downs and Ginter disclose the method of claim 1, but do not disclose a checksum over a data block containing information.

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Smithies, however, discloses a checksum over a data block containing information (Column 13, lines 51-63). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the checksum technique of Smithies into the rights protection system of Shear as modified by Downs and Ginter in order to ensure that the data was not decrypted, modified, and re-encrypted, thus maintaining integrity.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER